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Illinois
Environmental
Protection Agency

Division of Public Water Supplies
2200 Churchill Road
Springfield, Illinois 62706

32328972

Groundwater Quality Protection Program

Karnak
FACILITY NUMBER 1530050
WELL SITE SURVEY REPORT

Division of Public Water Supplies



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GROUNDWATER QUALITY PROTECTION PROGRAM:

**Karnak
FACILITY NUMBER 1530050
WELL SITE SURVEY REPORT**

Presented by:

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<https://archive.org/details/karnakfacilitynu00unse>

INTRODUCTION

This report has been prepared by the Illinois Environmental Protection Agency (Agency) pursuant to Section 17.1 of the Illinois Environmental Protection Act (Act). The report summarizes information about your facility and samples collected and analyzed from your well(s). The well site survey provides an inventory of the area around the well(s) to help increase your awareness of potential hazards to the groundwater utilized by your facility. This information and technical data will assist you in developing and implementing local groundwater protection measures authorized by the Act.

FACILITY DESCRIPTION AND GEOLOGIC PROFILE OF WELL SITES

Karnak has two active public water supply wells. The facility produces 52,000 gallons per day to an estimated population of 581. See Table I for a description of each well. The wells utilize a sand and gravel aquifer overlain by thick, permeable sand and gravel within 20 feet of the land surface. Permeability is the ability of a soil or sediment to transmit fluids. A detailed description and geologic profile is found in the Facility wells Report (Appendix C).

TABLE 1

Well I.D.	Setback		Status	Capacity		Specific Treatment	Aquifer	Well Depth (Ft.)	Well Logs Avail.
	Min. (Ft.)	Max. (Ft.)		(gpm) (MGD)	Capacity (gpm/ft)				
Well #1 (71070)	400		I 1/87	29.8 0.043	NA		Sand & Gravel	36	Y
Well #2 (71071)	400		A	43.0 0.062	NA		Sand & Gravel	32	Y
Well #3 (71072)	400		A	90.2 0.130	NA	F1	Sand & Gravel	128	Y

A=Active; I=Inactive; SB=Standby

GROUNDWATER SAMPLING/MONITORING HISTORY

The public water supply wells no. 1, and no. 3 were not sampled as part of the Statewide Groundwater Monitoring Network (well no. 2 was sampled June 4, 1986). Well no. 1 and no. 3 have been sampled for inorganic chemicals (IOC) to comply with the Safe Drinking Water Act. In the future the wells will be sampled for volatile organic and aromatic chemicals (VOC/VOA) as part of an amendment to the Act. The IOC analysis performed has found the water in the wells to have elevated levels of iron which is not uncommon for similar type wells in the area. Well No. 2 was also sampled for Synthetic Organic Chemicals (SOC). The SOC analyses performed found no detectable levels of pesticides in the well.

SURVEY METHODS AND PROCEDURES

The detailed well site survey consists of an aerial photographic map and inventory sheets (Appendix B), that relate information about potential sources, routes and possible problem sites to your water supply well(s). The location of potential sources, routes, possible problem sites, water supply wells, minimum setback zones, and 1,000 foot survey area are all displayed on the aerial photographic map.

The first page of each survey consists of a summary description and geologic profile for each well. The second and following pages of the survey inventory units within and bordering a 1,500 foot radius of the wellhead. A unit is defined as any device, mechanism, equipment, or area (exclusive of land utilized for agricultural production). The Agency five-digit well number is associated with a unit or map code, and then classified. The classification codes relate to definitions of potential contamination sources and routes as defined in the Illinois Groundwater Protection Act (see Groundwater Primer pages 18-19). The distance and direction of the unit from the wellhead is also indicated.

Survey Results and Findings:

The well site survey of Karnak was conducted on June 19, 1991 by Anthony Dulka Environmental Protection Specialist from the Agency's Springfield Office. The following describes the results and findings for Karnak.

Karnak well #2 (71071)

The survey area is urban consisting of moderate density residential housing and commercial businesses. The well is located east of town. There are no visible potential sources, routes, or possible problem sites within the minimum setback zone (400 feet). There is one visible potential source, or possible problem site located outside the minimum setback zone but within the survey area (1500 feet). This site is Karnak Small Engines (map code 1) located 1200 feet northeast of the well.

Karnak well #3 (71072)

The survey area is urban consisting of moderate density residential housing and commercial businesses. The well is located northeast of town. There are no visible potential sources, routes, or possible problem sites within the minimum setback zone (400 feet) or within the minimum setback zone but within the survey area (1500 feet).

SUMMARY

The well site survey conducted indicates that there is a potential source/site that could pose a hazard to groundwater utilized by the Karnak.

-The concern may be Karnak Small Engines.

The Illinois Environmental Protection Act provides minimum protection zones for your wells. These minimum protection zones are regulated by the Agency. The Act also authorizes county and municipal officials the opportunity to provide maximum protection zones up to 1,000 feet. The responsibility for the control would then be assumed by the local officials through adoption of a maximum setback zone ordinance. Dupage County Officials should be contacted in order to make an application.

Maximum setback zones prohibit the siting of new potential primary sources of groundwater contamination. A maximum setback up to 1,000 feet could expand the regulatory coverage of certain existing and new activities. These controls could be implemented upon the adoption of proposed regulations by the Illinois Pollution Control Board.

RECOMMENDATIONS

The Agency strongly urges Karnak to consider establishing a maximum setback zone ordinance for its wells. Maximum setback zones prohibit the siting of new potential primary sources of groundwater contamination up to 1000 feet from respective wellheads. To aid you in the development of further regulatory coverage for your well supply, the Agency prepared a "Maximum Setback Zone Workbook" that provides detailed case studies of how to establish maximum setback zones. This text and further technical assistance is readily available from the Agency and the Illinois State Water Survey.

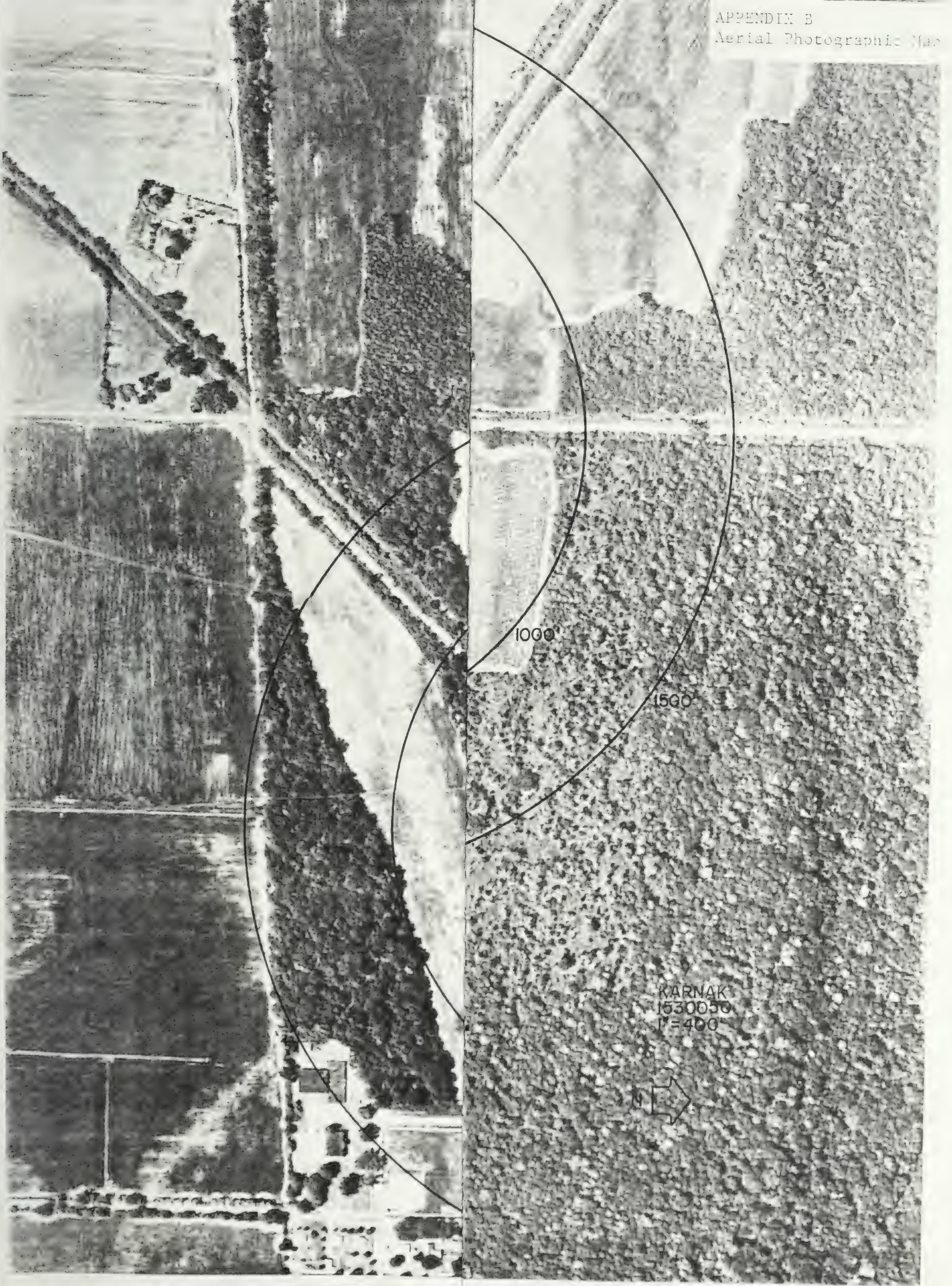
Local governments are also encouraged to consider conducting groundwater protection needs assessments. Any county or municipality having a population less than 25,000 or 5,000 persons respectively, may request the Agency to conduct a hazard review in lieu of a need's assessment. The Agency may issue an "advisory of groundwater contamination hazard" if a significant hazard to the public health or the environment exists.

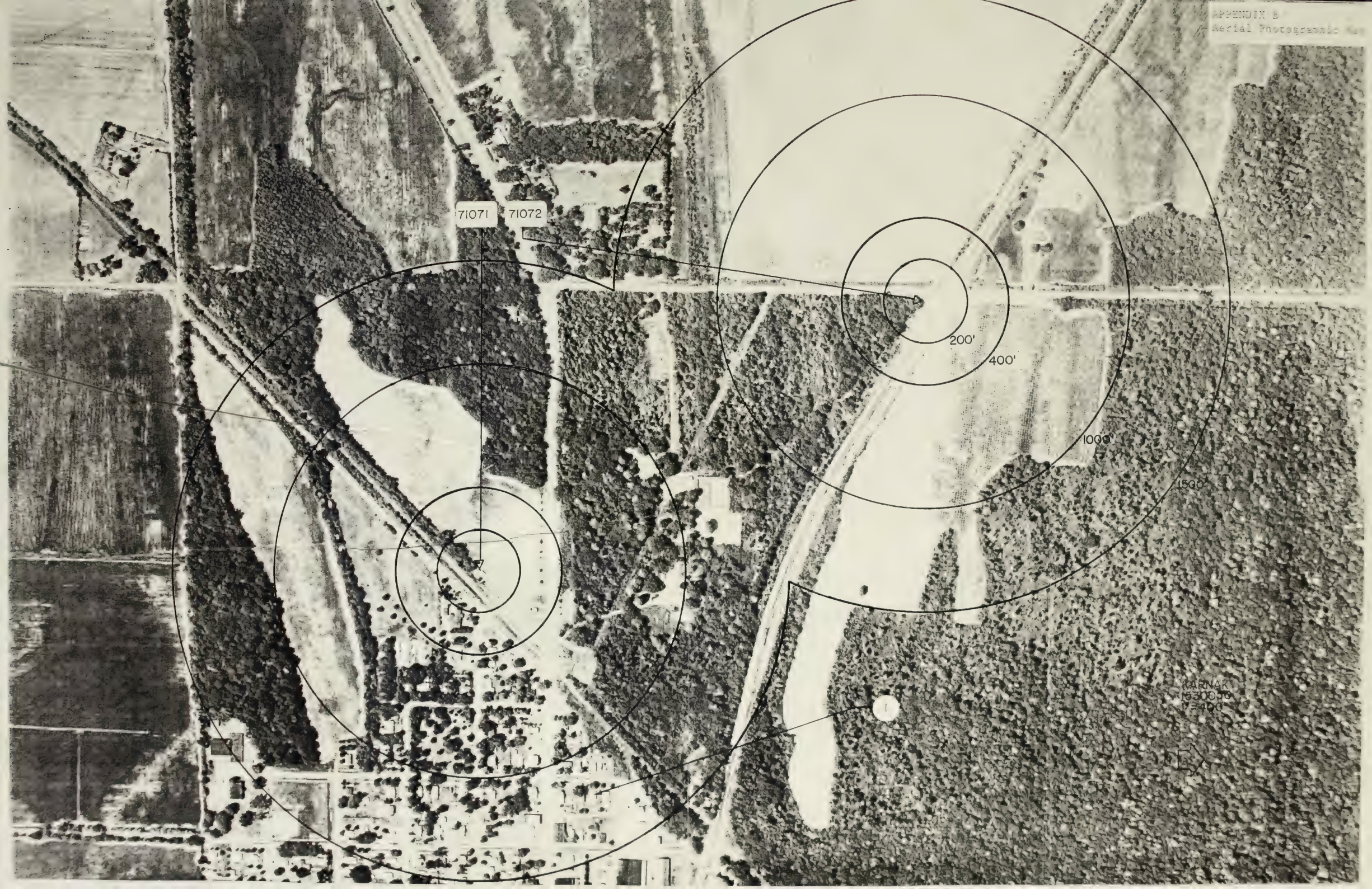
TECHNICAL APPENDICES

APPENDIX A - Topographic Map of Karnak
(1530050) Well Locations

Cache River
JOHNSON CO
PULASKI CO
CENTRAL
INDEFINITE
CHICAGO
AND
NEW YORK
Karnak
EASTERN
ILLINOIS
Roadside Park
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SCALE: 1"=2000'





71071

71072

200'

400'

1000'

1500'

I

RAENAR
1630056
17400

Appendix B1 - WELL SITE SUMMARY DESCRIPTION AND GEOLOGIC PROFILE
Karnak Well No. 2 (IEPA #71071)

SURVEYOR: Dulka
SURVEY DATE: 06-19-91
ADDRESS: Karnak
Village President
Village Hall
Karnak, IL 62956

AGENCY WELL NO: 71071
WELL NAME & DESC: well #2
TREATMENT APPLICATION POINT: 02
FACILITY NO. & NAME: 1530050 - Karnak
FACILITY PHONE CONTACT: 618-634-9311

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 14S, 02E, 15, 6C
DISTANCE FROM CORNER: 1450N, 1540E
QUAD SHEET CODE & NAME: 279C - Karnak
MIN. SETBACK: 400 feet
MAX. SETBACK:

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2-Thick, permeable sand and gravel
within 20 feet of the land surface.
AGE OF WELL: 1979
WELL DEPTH: 32 feet
CASING DEPTH: 22
AQUIFER CODE: 0101 - Sand and gravel
MULTIPLE AQUIFER (Y,N): no
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting of
moderate density residential housing and commercial businesses.

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) Karnak Well No. 2
(IEPA #71071)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 71071-01

NAME & ADDRESS OF UNIT OWNER: Karnak Small Engines, Garfield, Karnak, Il 62956

DESCRIPTION AND COMMENTS: Service/Repair Shop

PRE OR POST (Y,N): Yes

DISTANCE AND DIRECTION: 1200 feet northeast of the well

Appendix B2 - WELL SITE SUMMARY DESCRIPTION AND GEOLOGIC PROFILE
Karnak Well No. 3 (IEPA #71072)

SURVEYOR: Dulka
SURVEY DATE: 06-19-91
ADDRESS: Karnak
Village President
Village Hall
Karnak, IL 62956

AGENCY WELL NO: 71072
WELL NAME & DESC: well #3
TREATMENT APPLICATION POINT: 03
FACILITY NO. & NAME: 1530050 - Karnak
FACILITY PHONE CONTACT: 618-634-9311

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 14S, 02E, 15, 8F
DISTANCE FROM CORNER:
QUAD SHEET CODE & NAME: 279C - Karnak
MIN. SETBACK: 400 feet
MAX. SETBACK:

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2-Thick, permeable sand and gravel
within 20 feet of the land surface.
AGE OF WELL: 1986
WELL DEPTH: 128 feet
CASING DEPTH: NA
AQUIFER CODE: 0101 - Sand and gravel
MULTIPLE AQUIFER (Y,N): no
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting of
moderate density residential housing and commercial businesses.

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) Karnak Well No. 3
(IEPA #71072)

***CLASSF KEY**

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 71072-01
NAME & ADDRESS OF UNIT OWNER: Karnak Small Engines, Garfield, Karnak, Il 62956
DESCRIPTION AND COMMENTS: Service/Repair Shop
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2800 feet southeast of the well

APPENDIX C

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES
FACILITY WELLS REPORT

PAGE: 8
DATE: 06/10/93

REPORT: PWGMP053
MODULE: PWGMP027

FACILITY: 1530050 KARNAK

OWNER

OFFICIAL CUSTODIAN

CHARLES H BARNETT

VILLAGE PRESIDENT

VILLAGE HALL

KARNAK IL 62956

WELL: 71070 WELL 1
LATITUDE: N37 17 37.0

STATUS: ABANDONED
LONGITUDE: W088 58 44.0

TWP: 14S RNG: 02E SEC: 15 PLOT: 2G
DRILLED DEPTH(FT): 36

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): NONE ---

ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN

INTERVAL 1 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

INTERVAL 2 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

INTERVAL 3 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

AQUIFERS: QUATERNARY SYSTEM

WELL: 71071 WELL 2
LATITUDE: N37 17 35.0

STATUS: ACTIVE
LONGITUDE: W088 58 44.0

TWP: 14S RNG: 02E SEC: 15 PLOT: 6C
DRILLED DEPTH(FT): 32

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---

ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN

INTERVAL 1 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

INTERVAL 2 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

INTERVAL 3 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

AQUIFERS: QUATERNARY SYSTEM

WELL: 71072 WELL 3
LATITUDE: N37 17 54.0

STATUS: ACTIVE
LONGITUDE: W088 59 01.0

TWP: 14S RNG: 02E SEC: 15 PLOT: 8F
DRILLED DEPTH(FT): 128

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---

ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN

INTERVAL 1 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

INTERVAL 2 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

INTERVAL 3 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

SUSCEPTIBILITY CODES
LAND BURIAL: A2 = THICK, PERMEABLE SAND AND GRAVEL WITHIN 20 FT OF LAND SURFACE.

APPENDIX D

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES
SELECTED SAMPLE EXPANDED REPORT

PAGE: 51
DATE: 06/10/93

REPORT: PWJWPC48
MODULE: PWJWMO26

FACILITY: 1530050 KARNAK STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: STATUS:
RAW SRCE: STATUS:

SAMPLE NO: B71061100 LOCATION: WELL #3
SMPL TYPE: RAW COLLECTOR: G. BURGESS
SMPL PURP: 1-ROUTINE COMMENTS:
SMPL PRPG: C-CHEMICAL OBSRVATNS:

COLL DATE: 07/02/87 DELIVERED BY:
LAB RCVD: 07/06/87 RECEIVED BY:
LAB COMPL: LAB SUPERVISOR:
SMPL PERIOD: 07/87 FUND CODE:

ANALYSIS		STORET		STANDARD		TRIGGER	
ID	NO	NO	DESCRIPTION	UNITS	RESULT	DRINK WTR	RAW WTR
0095			CONDUCTIVITY(CE)-LAB(CUMHDS/CM @ 25 C		440.000		
0096			PH LABORATORY UNITS		7.600		
0097			ALKALINITY, TOTAL MG/L AS CAC03		224.000		
0098			NITROGEN, AMMONIA TOTAL MG/L AS N		0.160		
0099			NITRATE & NITRITE TOTAL MG/L AS N		0.100 <	10.000	
0100			CYANIDE, TOTAL MG/L AS CN		0.005 <	0.200	
0101			HARDNESS, EDTA MG/L AS CAC03		216.000		
0102			CALCIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		64.000		
0103			MAGNESIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		15.000		
0104			SODIUM, TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		13.000		
0105			POTASSIUM, TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		0.940		
0106			CHLORIDE, TOTAL MG/L AS CL		7.200		
0107			SULFATE, TOTAL MG/L AS S04		10.000 <		
0108			FLUORIDE, TOTAL MG/L AS F		0.250	4.000	
0109			SILICA, TOTAL MG/L AS S102		22.000		
0110			ARSENIC, TOTAL RECOVERABLE UG/L AS AS		1.000 <	50.000	
0111			BARIUM, TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		27.000	1000.000	
0112			BERYLLIUM, TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <		
0113			BORON, TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		50.000 <		
0114			CADMIUM, TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP		3.000 <	10.000	
0115			CHROMIUM, TOTAL RECOVERABLE UG/L AS CR ANAL BY ICP		5.000 <	50.000	
0116			COBALT, TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <		
0117			COPPER, TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000	5000.000	
0118			IRON, TOTAL RECOVERABLE UG/L AS FE ANAL BY ICP		2284.000	1000.000*	
0119			LEAD, TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000	
0120			MANGANESE, TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		468.000	150.000*	
0121			NICKEL, TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000 <		
0122			SILVER, TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000 <	50.000	
0123			STRONTIUM, TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		195.000		
0124			VANADIUM, TOTAL RECOVERABLE UG/L AS V ANAL BY ICP		5.000 <		
0125			ZINC, TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		50.000 <	5000.000	
0126			ALUMINUM, TOTAL RECOVERABLE UG/L AS AL ANAL BY ICP		50.000 <		
0127			RESIDUE, TOTAL FILTERABLE @180 C, MG/L		207.000		
0128			MERCURY, TOTAL UG/L AS HG		0.050 <	2.000	

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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REPORT: PWG4P048
MODULE: PWGWM026

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FACILITY: 1530050 KARNAK STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 01 WFL #1 100YDS NW WTP STATUS: B
RAW SRCE: 71070 WELL 1 STATUS: B

SAMPLE NO: B025281 LOCATION: WELL #1
SMPL TYPE: RAW COLLECTOR: JAMES COLLINS
SMPL PURP: 1-ROUTINE COMMENTS:
SMPL PRPG: I-JWM INORG 33SRVATNS:

COLL DATE: 02/14/83 DELIVERED BY:
LAB RCVD: 04/07/83 RECEIVED BY:
LAB COMPL: LAB SUPERVISOR:
SMPL PERIOD: 02/83 FUND CODE:

ANALYSIS RSLT -----STORET-----
ID NO NO DESCRIPTION

-----STANDARDS-----
RESULT UNITS DRINK MTR RAM MTR TRIGGER LEVEL

00095	CONDUCTIVITY(CEC)-LAB(CUMHDS/CM @ 25 C	370.000			
00403	PH LABORATORY UNITS	6.200			
00410	ALKALINITY,TOTAL MG/L AS CaCO3	49.000			
00610	NITROGEN,AMMONIA TOTAL MG/L AS N	0.100	<		
00630	NITRATE & NITRITE TOTAL MG/L AS N	3.300			10.000
00720	CYANIDE,TOTAL MG/L AS CN	0.005	<		0.200
00900	HARDNESS,ECTA MG/L AS CaCO3	118.000			
00916	CALCIUM,TOTAL RECOVERABLE MG/L AS Ca ANAL BY ICP	25.000			
00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS Ca ANAL BY ICP	11.000			
00929	SODIUM,TOTAL RECOVERABLE MG/L AS Na ANAL BY ICP	26.000			
00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	6.900			
00940	CHLORIDE,TOTAL MG/L AS CL	37.000			
00945	SULFATE,TOTAL MG/L AS SO4	61.000			
00951	FLUORIDE,TOTAL MG/L AS F	0.100	<		4.000
00956	SILICA,TOTAL MG/L AS SiO2	27.000			
01002	ARSENIC,TOTAL RECOVERABLE UG/L AS AS	1.000			50.000
01007	BARIUM,TOTAL RECOVERABLE UG/L AS Ba ANAL BY ICP	47.000			1000.000
01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS Be ANAL BY ICP	0.500	<		
01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	180.000			
01027	CADMIUM,TOTAL RECOVERABLE UG/L AS Cd ANAL BY ICP	3.000	<		10.000
01034	CHROMIUM,TOTAL RECOVERABLE UG/L AS Cr ANAL BY ICP	6.000	<		50.000
01037	CORALIT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	12.000			
01042	COPPER,TOTAL RECOVERABLE UG/L AS Cu ANAL BY ICP	7.000			5000.000
01043	IRON,TOTAL RECOVERABLE UG/L AS Fe ANAL BY ICP	3500.000			1000.000*
01051	LEAD,TOTAL RECOVERABLE UG/L AS Pb	8.000			50.000
01055	MANGANESE,TOTAL RECOVERABLE UG/L AS Mn ANAL BY ICP	300.000			150.000*
01067	NICKEL,TOTAL RECOVERABLE UG/L AS Ni ANAL BY ICP	36.000			
01077	SILVER,TOTAL RECOVERABLE UG/L AS Ag ANAL BY ICP	5.000	<		50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS Sr ANAL BY ICP	196.000			
01087	VANADIUM,TOTAL RECOVERABLE UG/L AS V ANAL BY ICP	4.000	<		
01092	ZINC,TOTAL RECOVERABLE UG/L AS Zn ANAL BY ICP	71.000			5000.000
01147	SELENIUM,TOTAL RECOVERABLE UG/L AS SE	1.000			10.000
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	279.000			
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	220.000			
71900	MERCURY,TOTAL UG/L AS Hg	0.050	<		2.000

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REPORT: PWGMP048
MODULE: PWGWH026

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FACILITY: 1530050 KARNAK LOCATION: KARNAK/WELL 2
TAP: 02 WELL #2 WITHIN WTP
RAW SRCE: 71071 WELL 2
STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
STATUS: A
STATUS: A

SAMPLE NO: D19384800 COLL DATE: 06/19/91 DELIVERED BY: A D
SMPL TYPE: RAW COLLECTOR: A DULKA LAB RCVD: 06/20/91 RECEIVED BY: H E
SMPL PURP: 5-SPEC/OTHR COMMENTS: GW PESTICIDE LAB COMPL: 08/29/91 LAB SUPERVISOR: JTH
SMPL PRCS: 6-GWM PEST OBSRVATNS: 1 GAL WATER SMPL PERIOD: 06/91 FUND CODE: PW33

ANALYSIS		RESULT		UNITS		---STANDARDS---		TRIGGER	
ID	NO	NO	DESCRIPTION	UNITS	RESULT	DRINK MTR	RAW MTR	LEVEL	
412WA00	001	39340	LINDANE UG/L	UG/L	0.010 <	4.000			
412WA00	002	39410	HEPTACHLOR UG/L	UG/L	0.010 <	0.100			
412WA00	003	39330	ALDRIN UG/L	UG/L	0.010 <	1.000			
412WA00	004	39420	HEPTACHLOR EPOXIDE UG/L	UG/L	0.010 <	0.100			
412WA00	005	39348	ALPHA CHLORDANE UG/L	UG/L	0.010 <				
412WA00	006	39810	GAMMA CHLORDANE UG/L	UG/L	0.010 <				
412WA00	007	39380	DELORIN UG/L	UG/L	0.010 <	1.000			
412WA00	008	39330	ENDRIN UG/L	UG/L	0.010 <	0.200			
412WA00	009	39440	METHOXYCHLOR UG/L	UG/L	0.050 <	100.000			
412WA00	010	39327	O,P'-DDT UG/L	UG/L	0.010 <				
412WA00	011	39320	P,P'-DDE UG/L	UG/L	0.010 <				
412WA00	012	39315	O,P'-DDD UG/L	UG/L	0.010 <				
412WA00	013	39310	P,P'-DDD UG/L	UG/L	0.010 <				
412WA00	014	39305	O,P'-DDT UG/L	UG/L	0.010 <				
412WA00	015	39300	P,P'-DDT UG/L	UG/L	0.010 <				
412WA00		39370	TOTAL DDT UG/L		0.000	50.000			
412WPC0	001	39516	TOTAL PCB'S UG/L	UG/L	0.100 <				
412WT00	001	39400	TOXAPHEN UG/L	UG/L	1.000 <	5.000			
418WH00	001	39730	2,4-D UG/L	UG/L	0.100 <	10.000			
418WH00	002	39740	SILVEX UG/L	UG/L	0.050 <	10.000			
418WN00	001	46313	PHORATE UG/L	UG/L	0.050 <				
418WN00	002	39570	DIAZINON UG/L	UG/L	0.050 <				
418WN00	003	39357	RONNEL UG/L	UG/L	0.050 <				
418WH00	004	39600	METHYL PARATHION UG/L	UG/L	0.050 <				
418WN00	005	82088	TERBUFOS (COUNTER) UG/L	UG/L	0.050 <				
418WN00	006	81294	DYFONATE UG/L	UG/L	0.050 <				
418WN00	007	81403	DURSABAN UG/L	UG/L	0.050 <				
418WN00	008	39530	MALATHION UG/L	UG/L	0.050 <				
418WN00	009	39398	ETHION UG/L	UG/L	0.050 <				
418WN00	010	81284	TRIFLAN UG/L	UG/L	0.010 <				
418WN00	011	39630	ATRAZINE (CAATREX) UG/L	UG/L	0.050 <				
418WN00	012	77825	ALACHLOR UG/L	UG/L	0.020 <				
418WN00	013	39356	METOLACHLOR (QUAL) UG/L	UG/L	0.035 <				
418WN00	014	81757	CYANAZINE UG/L	UG/L	0.050 <				
5001200	001	72037	PUMPING RATE GPM	GAL/M	49.000				
5001200	004	00400	PH PH UNITS	UNITS	5.220				
5001200	005	00010	WATER TEMPERATURE DEG C	DEG.C	14.100				

SAMPLE NO: Z000039 LOCATION: WELL
SMPL TYPE: RAW COLLECTOR: IFPA SMPL COLLECTOR
COLL DATE: 06/04/86 DELIVERED BY:
LAB RCVD: 00/00/00 RECEIVED BY:

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REPORT: PW5WPD048
MODULE: PWGWM026

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FACILITY: 1530050 KARNAK

*** CONTINUED ***

SMPL PURP: 5-SPEC/OTHR COMMENTS:
SMPL PRG: B-GWM PEST 03SRVATNS:

LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PERIOD: 06/86 FUND CODE:

ANALYSIS RSLT -----STORET-----
ID NO NO DESCRIPTION

-----STANDARDS-----
RESULT DRINK WTR RAW WTR TRIGGER
LEVEL

0000001	001	39023	PHOSPHATE UG/L	0.050	<		
0000001	002	39300	P,P'-DDT UG/L	0.010	<		
0000001	003	39305	O,P'-DDT UG/L	0.010	<		
0000001	004	39310	P,P'-DDD UG/L	0.010	<		
0000001	005	39315	O,P'-DDD UG/L	0.010	<		
0000001	006	39320	P,P'-DDF UG/L	0.010	<		
0000001	007	39327	O,P'-DDF UG/L	0.010	<		
0000001	008	39330	ALDRIN UG/L	0.010	<	1.000	
0000001	009	39340	LINDANE UG/L	0.010	<	4.000	
0000001	010	39356	METOLACHLOF (DUAL) UG/L	0.100	<		
0000001	011	39380	DIELDRIN UG/L	0.010	<	1.000	
0000001	012	39390	ENDRIN UG/L	0.010	<	0.200	
0000001	013	39398	ETHION UG/L	0.050	<		
0000001	014	39400	TOXAPHENE UG/L	1.000	<	5.000	
0000001	015	39410	HEPTACHLOR UG/L	0.010	<	0.100	
0000001	016	39420	HEPTACHLOR EPOXIDE UG/L	0.010	<	0.100	
0000001	017	39480	METHOXYCHLOR UG/L	0.050	<	100.000	
0000001	018	39516	TOTAL PCP'S UG/L	0.100	<		
0000001	019	39530	MALATHION UG/L	0.050	<		
0000001	020	39570	DIAZINON UG/L	0.050	<		
0000001	021	39600	METHYL PARATHION UG/L	0.050	<		
0000001	022	39630	ATRAZINE (CAATREX) UG/L	0.050	<		
0000001	023	39730	2,4-D UG/L	0.050	<	10.000	
0000001	024	39760	SILVEX UG/L	0.010	<	10.000	
0000001	025	39810	GAMMA CHLORDANE UG/L	0.010	<		
0000001	026	77825	ALACHLOR UG/L	0.020	<		
0000001	027	81294	DYFONATE UG/L	0.050	<		
0000001	028	81403	DURSAN UG/L	0.050	<		
0000001	029	81757	CYANAZINE UG/L	0.050	<		
0000001	030	82088	TERBUFGS (COUNTER) UG/L	0.050	<		
0000001	031	00010	WATER TEMPERATURE DEG C	15.000			
0000001	032	00053	FLOW (PUMPING) RATE GAL/MIN	45.000			
0000001	033	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	140.000			
0000001	034	00095	CONDUCTIVITY(CE)-LAB(UMHOS/CM @ 25 C	190.000			
0000001	035	00400	PH PH UNITS	5.300			
0000001	036	72064	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	230.000			
0000001	037	90410		27.000			

SAMPLE NO: B10857600 LOCATION: KARNAK WELL 2
SMPL TYPE: RAW COLLECTOR: A DULKA
SMPL PURP: 5-SPEC/OTHR COMMENTS:
SMPL PRG: 1-GWM INORG OBSRVATNS:
COLL DATE: 06/19/91 DELIVERED BY: UPS
LAB RCVD: 06/21/91 RECEIVED BY: MAD
LAB COMPL: 07/31/91 LAB SUPERVISOR: RPF
SMPL PERIOD: 06/91 FUND CODE: PW33

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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REPORT: PWSWPJ48
MODULE: PWSGHC26

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DATE: 06/10/93

FACILITY: 1530050 KARNAK

*** CONTINUED ***

ANALYSIS		STOREY		STANDARD		TRIGGER	
ID	NO	MG	DESCRIPTION	RESULT	DRINK WTR	RAW WTR	LEVEL
102T000	001	70300	RESIDUE, TOTAL FILTERABLE @180 C, MG/L	109.000			
103T000	001	00410	ALKALINITY, TOTAL MG/L AS CaCO3	24.000			
107T000	001	00951	FLUORIDE, TOTAL MG/L AS F			4.000	
108T000	001	00940	CHLORIDE, TOTAL MG/L AS CL	0.070			
109T000	001	00945	SULFATE, TOTAL MG/L AS SO4	5.400			
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	35.000			
111T000	001	00610	NITROGEN, AMMONIA TOTAL MG/L AS N	0.730		10.000	
112T000	001	32730	PHENOLS, TOTAL RECOVERABLE UG/L	0.070			
114T000	001	00956	SILICA, TOTAL MG/L AS SiO2	5.000			
115T000	001	00665	PHOSPHORUS, TOTAL MG/L AS P	21.500			
116T000	001	00720	CYANIDE, TOTAL MG/L AS CN	0.098			
144T000	001	01002	ARSENIC, TOTAL RECOVERABLE UG/L AS AS	0.005		0.200	
151T000	001	01051	LEAD, TOTAL RECOVERABLE UG/L AS PB	1.000		50.000	
153T000	001	71900	MERCURY, TOTAL UG/L AS HG	5.000		50.000	
155T000	001	01147	SELENIUM, TOTAL RECOVERABLE UG/L AS SE	0.050		2.000	
177T100	001	00916	CALCIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	1.000		10.000	
177T100	002	00927	MAGNESIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	10.300			
177T100	003	00929	SODIUM, TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	6.000			
177T100	004	00937	POTASSIUM, TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	7.000			
177T100	005	01105	ALUMINUM, TOTAL RECOVERABLE UG/L AS AL ANAL BY ICP	2.200			
177T100	006	01007	BARIUM, TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	150.000			
177T100	007	01022	BORON, TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	24.000		1000.000	
177T100	008	01012	BERYLLIUM, TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	22.000			
177T100	009	01027	CADMIUM, TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP	1.000			
177T100	010	01034	CHROMIUM, TOTAL RECOVERABLE UG/L AS CR ANAL BY ICP	5.000		10.000	
177T100	011	01042	COPPER, TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	5.000		50.000	
177T100	012	01037	COBALT, TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000			
177T100	013	01045	IRON, TOTAL RECOVERABLE UG/L AS FE ANAL BY ICP	2000.000		1000.000*	
177T100	014	01055	MANGANESE, TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	190.000		150.000*	
177T100	015	01067	NICKEL, TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	15.000			
177T100	016	01077	SILVER, TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	5.000		50.000	
177T100	017	01082	STRONTIUM, TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	82.000			
177T100	018	01087	VANADIUM, TOTAL RECOVERABLE UG/L AS V ANAL BY ICP	5.000			
177T100	019	01092	ZINC, TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	5.000			
177T100	020	82394	HARDNESS, CALC - MG/L	50.000		5000.000	
5001200	001	72037	PUMPING RATE GPM	50.000			
5001200	002	00094	CONDUCTIVITY - FIELD (UMHOS/CM @ 25 C)	49.000			
5001200	004	00400	PH PH UNITS	169.000			
5001200	005	00010	WATER TEMPERATURE DEG C	5.220			
				14.100			

SAMPLE NO: 2000030H LOCATION: WELL
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR
SMPL PUPP: 5-SPEC/OTHR COMMENTS:
SMPL PROG: I-GMM INORG OBSRVATNS:

COLL DATE: 06/04/86 DELIVERED BY:
LAB RCVD: 00/00/00 RECEIVED BY:
LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PERIOD: 06/86 FUND CODE:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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REPORT: PWGMP048
MODULE: PWGWM026

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FACILITY: 1530050 KARNAX

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ANALYSIS		RSLT	STORY		DESCRIPTION	UNITS	RESULT	DRINK WTR	RAW WTR	TRIGGER LEVEL
ID	NO	NO	NO	NO						

0000001	001	00610			NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630			NITRATE TOTAL MG/L AS N		2.900	10.000		
0000001	003	00665			PHOSPHORUS, TOTAL MG/L AS P		0.120			
0000001	004	00720			CYANIDE, TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916			CALCIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		13.000			
0000001	006	00927			MAGNESIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		6.900			
0000001	007	00929			SODIUM, TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		9.500			
0000001	008	00937			POTASSIUM, TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		1.900			
0000001	009	00940			CHLORIDE, TOTAL MG/L AS CL		33.000			
0000001	010	00945			SULFATE, TOTAL MG/L AS SO4					
0000001	011	00951			FLUORIDE, TOTAL MG/L AS F		0.100 <	4.000		
0000001	012	00956			SILICA, TOTAL MG/L AS SiO2		24.000			
0000001	013	01002			ARSENIC, TOTAL RECOVERABLE UG/L AS AS		1.000 <	50.000		
0000001	014	01007			BARIUM, TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		32.000	1000.000		
0000001	015	01012			BERYLLIUM, TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
0000001	016	01022			BORON, TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		50.000 <			
0000001	017	01027			CADMIUM, TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP		3.000 <	10.000		
0000001	018	01034			CHROMIUM, TOTAL RECOVERABLE UG/L AS CR ANAL BY ICP		5.000 <	50.000		
0000001	019	01037			COBALT, TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		7.000			
0000001	020	01042			COPPER, TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000 <	5000.000		
0000001	021	01045			IRON, TOTAL RECOVERABLE, UG/L AS FE ANAL BY ICP		2261.000	1000.000*		
0000001	022	01051			LEAD, TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
0000001	023	01055			MANGANESE, TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		241.000	150.000*		
0000001	024	01067			NICKEL, TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		18.000			
0000001	025	01077			SILVER, TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000 <	50.000		
0000001	026	01082			STRONTIUM, TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		104.000			
0000001	027	01087			VANADIUM, TOTAL RECOVERABLE UG/L AS V ANAL BY ICP		5.000 <			
0000001	028	01092			ZINC, TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		50.000 <	5000.000		
0000001	029	01105			ALUMINUM, TOTAL RECOVERABLE UG/L AS AL ANAL BY ICP		50.000 <			
0000001	030	01147			SELENIUM, TOTAL RECOVERABLE UG/L AS SE		1.000 <	10.000		
0000001	031	32730			PHENOLS, TOTAL RECOVERABLE UG/L		5.000 <			
0000001	032	70300			RESIDUE, TOTAL FILTERABLE @100 C, MG/L		150.000			
0000001	033	71900			MERCURY, TOTAL UG/L AS HG		0.170	2.000		
0000001	034	00010			WATER TEMPERATURE DEG C		15.000			
0000001	035	00059			FLOW (PUMPING) RATE GAL/MIN		45.000			
0000001	036	00090			OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		140.000			
0000001	037	00095			CONDUCTIVITY(EC)-LAB(CUMHDS/CM @ 25 C		190.000			
0000001	038	00400			PH PH UNITS		5.300			
0000001	039	72004			FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		230.000			
0000001	040	90410					27.000			

SAMPLE NO: 2000040	LOCATION: WELL	COLL DATE: 06/04/86	DELIVERED BY:
SMPL TYPE: RAW	COLLECTOR: IEPA SMPL COLLECTOR	LAB RCVD: 00/00/00	RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR	COMMENTS:	LAB COMPL: 00/00/00	LAB SUPERVISOR:
SMPL PRG: I-GWM INURC OASRVATNS		SMPL PERIOD: 06/86	FUND CODE:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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REPORT: PWGWP048
MODULE: PWGWM026

PAGE: 57
DATE: 06/10/93

FACILITY: 1530050 KARNAK

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ANALYSIS ID	RSLT NO	NO	DESCRIPTION	UNITS	STANDARD			RESULT	STANDARD			TRIGGER LEVEL
					DRINK	WTR	RAW		DRINK	WTR	RAW	
0000001	001	0010	NITROGEN, AMMONIA TOTAL MG/L AS N					0.100 <				
0000001	002	0030	NITRATE & NITRITE TOTAL MG/L AS N					2.700				
0000001	003	0065	PHOSPHORUS, TOTAL MG/L AS P					0.120			10.000	
0000001	004	0070	CYANIDE, TOTAL MG/L AS CN					0.010 <			0.200	
0000001	005	00916	CALCIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP					13.000				
0000001	006	00927	MAGNESIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP					6.900				
0000001	007	00929	SODIUM, TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP					9.800				
0000001	008	00937	POTASSIUM, TOTAL RECOVERABLE MG/L AS K ANAL BY ICP					1.900				
0000001	009	00940	CHLORIDE, TOTAL MG/L AS CL					10.000				
0000001	010	00945	SULFATE, TOTAL MG/L AS SO4					33.000				
0000001	011	00951	FLUORIDE, TOTAL MG/L AS F					0.100 <			4.000	
0000001	012	00956	SILICA, TOTAL MG/L AS SiO2					24.000				
0000001	013	01002	ARSENIC, TOTAL RECOVERABLE UG/L AS AS					1.000 <			50.000	
0000001	014	01007	BERYLLIUM, TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP					32.000			1000.000	
0000001	015	01012	BORON, TOTAL RECOVERABLE UG/L AS B ANAL BY ICP					0.500 <				
0000001	016	01022	CADMIUM, TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP					50.000 <				
0000001	017	01027	CHROMIUM, TOTAL RECOVERABLE UG/L AS CR ANAL BY ICP					3.000 <			10.000	
0000001	018	01034	COBALT, TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP					5.000 <			50.000	
0000001	019	01037	COPPER, TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP					6.000				
0000001	020	01042	IRON, TOTAL RECOVERABLE UG/L AS FE ANAL BY ICP					5.000 <			5000.000	
0000001	021	01045	LEAD, TOTAL RECOVERABLE UG/L AS PB					2396.000			1000.000*	
0000001	022	01051	MANGANESE, TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP					5.000 <			50.000*	
0000001	023	01055	NICKEL, TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP					16.000				
0000001	024	01067	SILVER, TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP					3.000 <			50.000	
0000001	025	01077	STRONTIUM, TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP					104.000				
0000001	026	01082	VANADIUM, TOTAL RECOVERABLE UG/L AS V ANAL BY ICP					5.000 <				
0000001	027	01047	ZINC, TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP					50.000 <			5000.000	
0000001	028	01092	ALUMINUM, TOTAL RECOVERABLE UG/L AS AL ANAL BY ICP					50.000 <				
0000001	029	01105	SELENIUM, TOTAL RECOVERABLE UG/L AS SE					1.000 <			10.000	
0000001	030	01147	PHENOLS, TOTAL RECOVERABLE UG/L					5.000 <				
0000001	031	01230	RESIDUE, TOTAL FILTERABLE 2180 CM/L					138.000				
0000001	032	01200	MERCURY, TOTAL UG/L AS HG					0.130			2.000	
0000001	033	01200	WATER TEMPERATURE DEG C					15.000				
0000001	034	00010	FLOW (PUMPING) RATE GAL/MIN					45.000				
0000001	035	00059	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS					140.000				
0000001	036	00090	CONDUCTIVITY (EC)-LAB (UMHNS/CM @ 25 C					190.000				
0000001	037	00095	PH PH UNITS					5.300				
0000001	038	00400	TIME PRIOR TO SAMPLING MIN					235.000				
0000001	039	00404	FLOW (PUMPING) RATE GAL/MIN					22.000				
0000001	040	00410										

SAMPLE NO: B014123 LOCATION: WELL #2

SMPL TYPE: RAW COLLECTOR: JAMES COLLINS

SMPL PURP: 1-ROUTINE COMMENTS:

SMPL PRG: I-JWM INORG OBSRVATNS:

COLL DATE: 10/04/83 DELIVERED BY:

LAB RCVD: 11/08/83 RECEIVED BY:

LAB COMPL: LAB SUPERVISOR:

SMPL PERIOD: 10/83 FUND CODE:

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ANALYSIS RSLT NO NO DESCRIPTION

STANDARD ORINK WTR RAW WTR TRIGGER LEVEL

00045	CONDUCTIVITY(CEC)-LAB(UHMHOS/CM @ 25 C	160.000		
00403	PH LABORATORY UNITS	6.500		
00410	ALKALINITY, TOTAL MG/L AS CaCO3	12.000		
00610	NITROGEN, AMMONIA TOTAL MG/L AS N	0.100 <		
00630	NITRATE & NITRITE TOTAL MG/L AS N	2.600	10.000	
00720	CYANIDE, TOTAL MG/L AS CN	0.005 <	0.200	
00900	HARDNESS, EDTA MG/L AS CaCO3	45.000		
00916	CALCIUM, TOTAL RECOVERABLE MG/L AS Ca ANAL BY ICP	8.000		
00927	MAGNESIUM, TOTAL RECOVERABLE MG/L AS Ca ANAL BY ICP	5.000		
00929	SODIUM, TOTAL RECOVERABLE MG/L AS Na ANAL BY ICP	8.000		
00937	POTASSIUM, TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	2.400		
00940	CHLORIDE, TOTAL MG/L AS CL	6.000		
00945	SULFATE, TOTAL MG/L AS SO4	30.000		
00951	FLUORIDE, TOTAL MG/L AS F	0.100	4.000	
00956	SILICA, TOTAL MG/L AS SiO2	22.000		
01002	ARSENIC, TOTAL RECOVERABLE UG/L AS AS	1.000	50.000	
01007	BARIUM, TOTAL RECOVERABLE UG/L AS Ba ANAL BY ICP	29.000	1000.000	
01012	BERYLLIUM, TOTAL RECOVERABLE UG/L AS Be ANAL BY ICP	0.500 <		
01022	BORON, TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	30.000		
01027	CADMIUM, TOTAL RECOVERABLE UG/L AS Cd ANAL BY ICP	3.000 <	10.000	
01034	CHROMIUM, TOTAL RECOVERABLE UG/L AS Cr ANAL BY ICP	5.000 <	50.000	
01037	COBALT, TOTAL RECOVERABLE UG/L AS Co ANAL BY ICP	6.000		
01042	COPPER, TOTAL RECOVERABLE UG/L AS Cu ANAL BY ICP	3.000	5000.000	
01045	IRON, TOTAL RECOVERABLE UG/L AS Fe ANAL BY ICP	2100.000	1000.000*	
01051	LEAD, TOTAL RECOVERABLE UG/L AS Pb	5.000 <	50.000	
01055	MANGANESE, TOTAL RECOVERABLE UG/L AS Mn ANAL BY ICP	257.000	150.000*	
01067	NICKEL, TOTAL RECOVERABLE UG/L AS Ni ANAL BY ICP	25.000		
01077	SILVER, TOTAL RECOVERABLE UG/L AS Ag ANAL BY ICP	5.000 <	50.000	
01082	STRONTIUM, TOTAL RECOVERABLE UG/L AS Sr ANAL BY ICP	86.000		
01087	VANADIUM, TOTAL RECOVERABLE UG/L AS V ANAL BY ICP	4.000 <		
01092	ZINC, TOTAL RECOVERABLE UG/L AS Zn ANAL BY ICP	13.000	5000.000	
01147	SELENIUM, TOTAL RECOVERABLE UG/L AS Se	1.000	10.000	
70300	TOTAL FILTERABLE SOLIDS MG/L BY EC	108.000		
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	100.000		
71900	MERCURY, TOTAL UG/L AS Hg	0.100 <	2.000	

SAMPLE NO: 01334900 LOCATION: KARNAK/WELL 2
SMPL TYPE: RAW COLLECTOR: A DULKA
SMPL PURP: 5-SPEC/OTHR COMMENTS: GW VOC/VOA
SMPL PRPG: V-VOC OBSRVATNS: 2 VOC

COLL DATE: 06/19/91 DELIVERED BY: A D
LAB RCVD: 06/20/91 RECEIVED BY: M E
LAB COMPL: 07/10/91 LAB SUPERVISOR: RTN
SMPL PERIOD: 06/91 FUND CODE: PW33

ANALYSIS RSLT NO NO DESCRIPTION

STANDARD ORINK WTR RAW WTR TRIGGER LEVEL

431W000	001	32106	CHLORODIFORMA UG/L GC/MS	1.000		
431W000	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	0.500 <		
431W000	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	0.500 <		

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431W00	004	32104	BROMOFORM	UG/L	CG/MS	UG/L	0.500	<
431W00	005	34030	BENZENE	UG/L		UG/L	0.500	<
431W00	006	32102	CARBON TETRACHLORIDE	UG/L	CG/MS	UG/L	0.500	<
431W00	007	34571	PARA-DICHLOROBENZENE	UG/L		UG/L	0.500	<
431W00	008	32103	1,2-DICHLOROETHANE	UG/L		UG/L	0.500	<
431W00	009	34501	1,1-DICHLOROETHYLENE	UG/L	CG/MS	UG/L	0.500	<
431W00	010	34506	1,1,1-TRICHLOROETHANE	UG/L	CG/MS	UG/L	0.500	<
431W00	011	39180	TRICHLOROETHYLENE	UG/L		UG/L	0.500	<
431W00	012	39175	VINYL CHLORIDE	UG/L		UG/L	0.500	<
431W00	013	81555	BROMOBENZENE	UG/L		UG/L	0.500	<
431W00	014	34413	BROMOMETHANE	UG/L		UG/L	0.500	<
431W00	015	34301	CHLOROBENZENE	UG/L		UG/L	0.500	<
431W00	016	34311	CHLOROETHANE	UG/L		UG/L	0.500	<
431W00	017	34418	CHLOROMETHANE	UG/L		UG/L	0.500	<
431W00	018	77970	TOTAL CHLOROTOLUENES	UG/L		UG/L	0.500	<
431W00	019	81522	DIBROMOMETHANE	UG/L		UG/L	0.500	<
431W00	020	34566	M-DICHLOROBENZENE	UG/L		UG/L	0.500	<
431W00	021	34536	1,2-DICHLOROETHANE	UG/L	CG/MS	UG/L	0.500	<
431W00	022	34496	CIS-1,2-DICHLOROETHYLENE	UG/L		UG/L	0.500	<
431W00	023	77093	TRANS-1,2-DICHLOROETHYLENE	UG/L	GC/MS	UG/L	0.500	<
431W00	024	34546	METHYLENE CHLORIDE	UG/L		UG/L	0.500	<
431W00	025	34423	1,2-DICHLOROPROPANE	UG/L		UG/L	0.500	<
431W00	026	34541	2,2-DICHLOROPROPANE	UG/L		UG/L	0.500	<
431W00	027	77170	1,3-DICHLOROPROPANE	UG/L		UG/L	0.500	<
431W00	028	77173	1,1-DICHLOROPROPENE	UG/L		UG/L	0.500	<
431W00	029	77168	TRANS-1,3-DICHLOROPROPYLENE	UG/L		UG/L	0.500	<
431W00	030	34699	CIS-1,3-DICHLOROPROPYLENE	UG/L		UG/L	0.500	<
431W00	031	34704	ETHYLBENZENE	UG/L		UG/L	0.500	<
431W00	032	34371	STYRENE	UG/L		UG/L	0.500	<
431W00	033	77128	1,1,1,2-TETRACHLOROETHANE	UG/L		UG/L	0.500	<
431W00	034	77562	1,1,2,2-TETRACHLOROETHANE	UG/L		UG/L	0.500	<
431W00	035	34516	TETRACHLOROETHYLENE	UG/L	CG/MS	UG/L	0.500	<
431W00	036	34475	TOLUENE	UG/L		UG/L	0.500	<
431W00	037	34010	1,1,2-TRICHLOROETHANE	UG/L		UG/L	0.500	<
431W00	038	34511	1,2,3-TRICHLOROPROPANE	UG/L		UG/L	0.500	<
431W00	039	77443	XYLENE	UG/L		UG/L	0.500	<
431W00	040	81551	PUMPING RATE	GPM		GAL/M	49.000	
5001200	001	72037	PH	PH UNITS		UNITS	5.220	
5001200	004	00400	WATER TEMPERATURE	DEG C		DEG.C	14.100	

SAMPLE NJ: 20J0037 LOCATION: WELL
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR
SMPL PURP: 5-SPEC/OTHP COMMENTS:
SMPL PRG: V-VOC OBSRVATNS:
COLL DATE: 06/04/86 DELIVERED BY:
LAB RCVD: 00/00/00 RECEIVED BY:
LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PERIOD: 06/86 FUND CODE:

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ANALYSIS		STRET		STANDARDS		TRIGGER	
ID	NO	NO	DESCRIPTION	UNITS	RESULT	DRINK MTR	LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L CG/MS		1.000 <		
0000001	002	32102	CARBON TETRACHLORIDE UG/L CG/MS		1.000 <	5.000	
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000	
0000001	004	32104	BROMOFORM UG/L CG/MS		1.000 <		
0000001	005	32105	DIATOMOCHLOROMETHANE UG/L CG/MS		1.000 <		
0000001	006	32106	CHLOROFORM UG/L CG/MS		1.000 <		
0000001	007	34010	TOLUENE UG/L		1.000 <	1000.000	
0000001	008	34030	BENZENE UG/L		1.000 <	5.000	
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <	100.000	
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <	700.000	
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <	5.000	
0000001	012	34475	TETRACHLOROETHYLENE UG/L CG/MS		1.000 <	5.000	
0000001	013	34496	1,1-DICHLOROETHYLENE UG/L CG/MS		1.000 <		
0000001	014	34501	1,1-DICHLOROETHYLENE UG/L CG/MS		1.000 <	7.000	
0000001	015	34506	1,1,1-TRICHLOROETHANE UG/L CG/MS		1.000 <	200.000	
0000001	016	34546	TRANS-1,2-DICHLOROETHYLENE UG/L CG/MS		1.000 <	100.000	
0000001	017	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000	
0000001	018	00010	WATER TEMPERATURE DEG C		15.000		
0000001	019	00059	FLOW (PUMPING) RATE GAL/MIN		45.000		
0000001	020	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		140.000		
0000001	021	00095	CONDUCTIVITY (EC)-LAB (UMHOS/CM @ 25 C		190.000		
0000001	022	00400	PH PH UNITS		5.300		
0000001	023	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		230.000		
0000001	024	90410			27.000		

APPENDIX E

NO WELL LOGS AVAILABLE AT THIS TIME

UNIVERSITY OF ILLINOIS-URBANA



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